

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (original) The use of phenylcoumaran benzylic ether reductase to modulate plant biomass.
2. (currently amended) The use according to claim 1, whereby said phenylcoumaran benzylic ether reductase comprises SEQ ID NO:2.
3. (currently amended) The use according to claim 1-~~or~~2, whereby said use is a repression of the activity of phenylcoumaran benzylic ether reductase.
4. (original) The use according to claim 3, whereby said repression of the activity is obtained by cosuppression RNAi.
5. (original) The use according to claim 3, whereby said repression of the activity is obtained by antisense RNA.
6. (currently amended) The use according to ~~any of the claims 1-5~~ claim 1, whereby said modulation is an increase of plant biomass.

7. (currently amended) The use according to claim 6, whereby said increase of plant biomass is an increase in plant stem biomass.
8. (currently amended) The use according to claim 6 ~~or 7~~, whereby said increase of biomass is combined with a lower lignin content.
9. (currently amended) The use according to claim 6 ~~or 7~~, whereby said increase is combined with a higher resistance to plant pathogens.
10. (currently amended) The use according to ~~any of the preceeding claims~~ claim 1, whereby said plant is a tree.
11. (original) The use according to claim 10, whereby said tree is a poplar tree.
12. (currently amended) The use according to ~~any of the preceding claims~~ claim 1, whereby said plant is grown under elevated CO₂ concentration.
13. (original) A method to modulate plant biomass, comprising the incorporation into the plant genome of a recombinant nucleic acid encoding a phenylcoumaran benzylic ether reductase, or its complement, or a functional fragment thereof.

14. (original) The method of claim 13, whereby said modulation is obtained under elevated CO₂ concentration.
15. (currently amended) A genetically modified plant, obtainable by the method of claim 13 ~~or 14~~.
16. (original) A genetically modified plant according to claim 15, expressing phenylcoumaran benzylic ether reductase antisense RNA.
17. (original) A genetically modified plant according to claim 15, expressing phenylcoumaran benzylic ether reductase RNAi.
18. (currently amended) A genetically modified plant according to claim 15-17, whereby said plant has an increased biomass.
19. (original) A genetically modified plant according to claim 18, whereby said increased biomass is increased stem biomass.
20. (currently amended) A genetically modified plant whereby according to ~~any of the claims 15-19~~ claim 15, whereby said increased biomass is obtained under elevated CO₂ concentration.

21. (currently amended) A genetically modified plant, according to ~~any of the claims~~
~~15-20~~ claim 15, whereby said plant has a lowered lignin content.

22. (currently amended) A genetically modified plant, according to ~~any of the claims~~
~~15-21~~ claim 15, whereby said plant has an increased resistance to plant
pathogens.

23. (currently amended) A genetically modified plant according to ~~any of the claims~~
~~15-22~~ claim 15, whereby said plant is a tree.

24. (original) A genetically modified plant according to claim 23, whereby said plant
is a poplar tree.